ABSTRACT OF THE DISCLOSURE

A variable pulse width optical pulse generation system includes a first and a second optical interferometric modulator. A first drive signal applied to the first modulator modulates an input optical signal, so as to provide a first modulated optical signal. A second drive signal applied to the second modulator modulates the first modulated optical signal, producing output optical pulses. One or both of the drive signals may be formed by superposing a plurality of waveforms having different frequencies, for example a base frequency and its odd harmonics. By adjusting the relative amplitudes of the drive signals, or the relative amplitudes of the component waveforms forming the drive signals, the pulse width and the extinction ratio of the output pulses can be varied so as to achieve an optimal value.